PROVISIONAL PROGRAMME - SUBJECT TO CHANGE
(Programme correct as at Thursday, 28 April 2022)

SATURDAY, 25 JUNE 2022

Start time	End Time	Duration	Track 1	Track 2	Track 3
			Breakwater Lodge (room TBC) & On-Line	Breakwater Lodge (room TBC)	On-Line Only
			WORKSHOP 1: Modelling environmental DNA data (Alex Diana and Ioannis Rotous - University of Kent; Eleni Matechou - University of Kent)	**WORKSHOP 2:** Tidy Data Manipulation and Animal Movement Modelling in R (Devin Johnson, NOAA-NMFS, USA; Josh London, NOAA-NMFS, USA; Brett McClintock, NOAA-NMFS, USA)	**WORKSHOP 3:** Hierarchical modeling with nimble (Perry de Valpine, Chris Paciorek, Daniel Turek)
09h00	10h30		Session 1	Session 1	
10h30	11h00		Tea Break	Tea Break	
11h00	12h30		Session 2	Session 2	
12h30	14h00		Lunch Break	Lunch Break	
14h00	15h30		Session 3	Session 3	Session 1
15h30	16h00		Tea Break	Tea Break	Tea Break
16h00	17h00		Closing session	Closing session	Session 2

SUNDAY, 26 JUNE 2022

Start time	End Time	Duration	Track 1	Track 2	Track 3
			On-line Only	Breakwater Lodge (room TBC) & On-line	Breakwater Lodge (room TBC) & On-line
			WORKSHOP 4: Bayesian Analysis of Capture-Recapture Data with Hidden Markov Models in Nimble (Olivier Gimenez, CNRS, France; Daniel Turek, Williams College, USA)	**WORKSHOP 5:** Advances in quantifying space-use and habitat-selection of animals (John Fieberg, University of Minnesota, USA; Tal Avgar, Utah State University, USA; Johannes Signer, University of Göttingen, Germany; Brian Smith, Utah State University, USA)	**WORKSHOP 6:** Hidden Markov models for animal movement and other ecological data (Roland Langrock, Bielefeld University, Germany)
09h00	10h30		Session 1	Session 1	Session 1
10h30	11h00		Tea Break	Tea Break	Tea Break
11h00	12h30		Session 2	Session 2	Session 2
12h30	14h00			Lunch Break	Lunch Break
14h00	15h30			Session 3	Session 3
15h30	16h00			Tea Break	Tea Break
16h00	17h00			Closing session	Closing session
18h00	20h00		Welcome Reception		

MONDAY, 27 JUNE 2022

Start time	End Time	Duration	Track 1	Track 2	Track 3	Track 4
			Auditorium	Venue 4	Venue 5	Venue 6
07h30	09h00	1h30	Registration open (Ground floor)			
09h00	10h30		OPENING PLENARY SESSION (Chairs: TBC)			
09h00	09h30	30min	Welcome			
09h30	10h30	1h00	**Invited Plenary 1** | Hierarchical Bayesian state-space modeling of age-and sex-structured wildlife population dynamics (Joseph Ogutu, University of Hohenheim, Germany)			
10h30	11h00	30min	Tea / Coffee Break			
11h00	12h30	1h30	SESSION 1 | Movement Ecology, Space Use and Habitat Selection (Chairs: TBC)	SESSION 2 | Capture-recapture and Hierarchical modelling (Chairs: TBC)	SESSION 3 | Multi-species occupancy modelling (Chairs: TBC)	
11h00	11h15	15min	OP1 | Paper 82 | Detecting behavioural responses from movement data using stochastic differential equations (Théo Michelot, University Of St Andrews, UK)	OP7 | Paper 40 | A Bayesian state-space nest survival model that incorporates breeding phenology to address unknown age and unknown fate data (Amanda Warlick, University of Washington, USA)	OP13 | Paper 152 | Examining homogenisation and ecological filtering of bird communities in three major South African cities (Jessleena Suri, University of Cape Town, South Africa)	

11h15	11h30	15min	OP2 | Paper 134 | Multi-scale animal movement modelling using state-switching varying-coefficient stochastic differential equations (Timo Adam, University of St Andrews, UK)	OP8 | Paper 103 | Capture-recapture models with heterogeneous temporary (Eleni Matechou, University of Kent, UK)	OP14 | Paper 165 | Anthropogenic land-use change shapes bird diversity along the eastern Himalayan altitudinal gradient (Ugyen Penjor, Nature Conservation Division, Bhutan)
11h30	11h45	15min	OP3 | Paper 131 | Bayesian Inference for Animal Movement: Rigorously Approximating Continuous-Time Models (Dominic Grainger, University Of Sheffield, UK)	OP9 | Paper 136 | Cannot see the wood for the trees: Survivorship bias in CMR models (Blanca Sarzo, University Of Valencia, Spain)	OP15 | Paper 150 | A penalized likelihood for multispecies occupancy models improves estimates of species interactions (Christopher Rota, West Virginia University, USA)
11h45	12h00	15min	OP4 | Paper 298 | Incorporating spatial learning into movement models for naïve animals in a novel environment (Tana Verzuh, University Of Wyoming, USA)	OP10 | Paper 59 | Large Data and Complex Ecological Models: When Worlds Collide (Ruth King, University Of Edinburgh, UK)	OP16 | Paper 60 | A multi-species co-occurrence index to avoid Type II errors in (Vitalis Lagat, Stellenbosch University, South Africa)
12h00	12h15	15min	OP5 | Paper 47 | A method to predict connectivity for waterbird species from tracking data (Sam Nicol, Commonwealth Scientific And Industrial Reseach Organisation (CSIRO), Australia)	OP11 | Paper 313 | Know what you don't know: Embracing uncertainty in hidden Markov models (Matthijs Hollanders, Southern Cross University, Australia)	OP17 | Paper 177| A Gibbs sampler for multi-species occupancy models (Allan Clark, University of Cape Town, South Africa)
12h15	12h30	15min	OP6 | Paper 23 | Circular-Linear Copulae for Animal Movement Data (Florian Hodel, Michigan State University, USA)	OP12 | Paper 285 | More dirty little secrets: effect of process and observation errors on inference in a nonlinear non-normal SSM (Fanny Empacher, University of St Andrews, UK)	OP18 | Paper 279 | Direct (conditional) and net (marginal) effects of environmental predictors in multivariate normal and autologistic models for multispecies modeling (Yunyi Shen, University of Wisconsin Madison, USA)
12h30	14h00	1h30	Lunch Break		
14h00	**15h30**	**1h30**	**SESSION 5 | Citizen science (Chairs: TBC)**	**SESSION 6 | Spatial Modelling (Chairs: TBC)**	**SESSION 7 | Population dynamics and Hierarchical modeling (Chairs: TBC)**	**SESSION 8 | Fisheries Management (Chairs: TBC)**
14h00	14h15	15min	OP25 | Paper 266 | An adaptive geostatistical sampling design for biodiversity studies via citizen science (Thomas Neyens, I-biostat (ku Leuven, Uhasselt), Belgium)	OP31 | Paper 228 | The role of age-structured propagule pressure and human-mediated dispersal in determining plant invasion dynamics (Christophe Botella, Stellenbosch University, South Africa)	OP37 | Paper 86 | Mechanistic hierarchical modeling reveals individual and demographic heterogeneity in migration strategy in a long-lived soaring bird (Hanna Mccaslin, Colorado State University, USA)	OP43 | Paper 216 | Dealing with unbalanced sampling through bivariate Bayesian regression models: maturity of European hake (Marta Cousido-Rocha, Instituto Español De Oceanografía, Spain)
14h15	14h30	15min	OP 26 | Paper 30 | Understand Observer's behavior in Citizen science data collection to better correct for sampling bias (Emy Guilbault, University Of Helsinki, Finland)	OP32 | Paper 222 | Combining data from new and emerging data streams -- towards a general statistical modelling approach (Janine Illian, University of Glasgow, UK)	OP38 | Paper 52 | Two-sex Integrated Population Model Reveals Differences in Life History Strategies for Female and Male Cooper's Hawks (Accipiter cooperii) (Brian Millsap, U. S. Fish And Wildlife Service, USA)	OP44 | Paper 267 | The sspm R package: spatial surplus production models for the management of northern shrimp fisheries (Valentin Lucet, Concordia University, Canada)
14h30	14h45	15min	OP 27 | Paper 38 | A probabilistic generating process of Citizen Science data: Modelling and Estimation of Parameters (Kwaku Adjei, Norwegian University Of Science And Technology, Norway)	OP33 | Paper 199 | Can we use catch declarations data to map fish spatial distribution? (Baptiste Alglave, Ifremer, France)	OP39 | Paper 268 | Comparable roadkill rates using open-population capture-recapture models (Talita Menger, Universidade Federal Do Rio Grande Do Sul, Brazil)	OP45 | Paper 316 | A censored likelihood approach for estimating hook-competition-adjusted relative abundance indices using longline fishing data (Joe Watson, Fisheries and Oceans Canada, Canada)
14h45	15h00	15min	OP 28 | Paper 184 | A Semi-structured Citizen Science Scheme that Improves Vascular Plant Monitoring in the Netherlands (Jelle van Zweden, Statistics Netherlands, The Netherlands)	OP34 | Paper 258 | Point Processes for Leopard Shark Aggregation Patterns (Vinky Wang, Department of Statistical Sciences, University Of Toronto, Canada)	OP40 | Paper 208 | A multi-state mark-recapture-recovery model to estimate rates of severe injury and cause-specific mortality in North Atlantic right whales (Daniel Linden, NOAA Fisheries, USA)	OP46 | Paper 159 | Design-Unbiased Trapezoid Area-Under-the-Curve Estimators for Estimating Salmon Escapement (Audrey Béliveau, University of Waterloo, Canada)
15h00	15h15	15min	OP 29 | Paper 65 | Identifying engaging bird species and traits with community science data (Banjamin Goldstein, UC Berkeley, USA)	OP35 | Paper 288 | Using ecological diffusion to inform management of a recovering apex predator (Joseph Eisaguirre, US Fish And Wildlife Service, USA)	OP41 | Paper 141 | Integrating spatiotemporal epidemiological models with time-to-event age-period survival models (Alison Ketz, University Of Wisconsin, Madison, USA)	OP47 | Paper 143 | Comparison of existing and spatio-temporal methods to apportion catch limits for subregional management of groundfish in the Gulf of Alaska (Kelly Mistry, University of Washington, USA)
15h15	15h30	15min	OP 30 | Paper 245 | Estimating Population Change with Citizen Science Data and Causal Machine Learning (Daniel Fink, Cornell Lab Of Ornithology, USA)	OP36 | Paper 292 | How many knots? Constructing spatiotemporal approximations that yield good out of sample predictive performance (Eric Ward, NOAA, USA)	OP42 | Paper 169 | Genetic Mark-Recapture Methods for Estimating Seasonal River Run Size of Stock Populations (Yiran Wang, University of Waterloo, Canada)	
15h30	16h00	30min	Tea / Coffee Break			
16h00	17h00	1h00	**Poster Session 1 (See poster programme)**			
17h00	**18h30**	**1h30**	**Public Lecture Session (Chairs: TBC)**			
17h00	17h30	30min	**Public Lecture 1** | Conservation projects in Africa: How effective are we? (Harriet T. Davies-Mostert, Head of Conservation | Endangered Wildlife Trust, South Africa)			
17h30	18h00	30min	**Public Lecture 2** | We need to do more to halt biodiversity loss! (Luthando Dziba, South African National Parks Board, South Africa)			
18h00	18h30	30min	Live Q&A Discussion			

TUESDAY, 28 JUNE 2022

Start time	End Time	Duration	Track 1	Track 2	Track 3	Track 4
			Auditorium	Venue 4	Venue 5	Venue 6
07h30	09h00	1h30	Registration open (Ground floor)			
08h00	09h00	1h00	Round Table Discussion 1 | Defining power in Bayesian statistics (Diego Barneche, Australian Institute Of Marine Science, Australia)	Round Table Discussion 2 | Should the statistical ecology community create a new, diamond open access journal? (Frédéric Barraquand, CNRS, France)	Round Table Discussion 3 | Integrated population models: brainstorming towards the organisation of a "best practices" workshop (Chloé Nater, Norwegian Institute For Nature Research, Norway)	Round Table Discussion 4 | Statistical Ecology in Africa (Natasha Karenyi, University of Cape Town, South Africa)
09h00	10h30	1h30	SESSION 9 | Population dynamics (Chairs: TBC)	SESSION 10 | Multi-species modelling / Joint species distribution models (Chairs: TBC)	SESSION 11 | Spatial capture-recapture (Chairs: TBC)	SESSION 12 | Genetic analyses and metabarcoding (Chairs: TBC)
09h00	09h15	15min	OP49 | Paper 92 | Using state-dependent life-history theory models to explore individual and population level responses to environmental change in a marine predator (Cassie Speakman, Deakin University, Australia)	OP55 | Paper 50 | Estimating effect size in multivariate analysis using bootstrap inversion (Michelle Lim, UNSW Sydney, Australia)	OP61 | Paper 99 | A clean, crafty, rapid approach to cluster capture-recapture (Rachel Fewster, University of Auckland, New Zealand)	OP67 | Paper 156 | Combining different genetic data types and additional ecological covariates in population genetic analyses (Louise McMillan, Victoria University of Wellington, New Zealand)
09h15	09h30	15min	OP50 | Paper 69 | State-space mark-recapture estimates of regional movement and abundance of Fiordland bottlenose dolphins (Tursiops truncatus) (Leah Crowe, University Of Otago, New Zealand)	OP56 | Paper 171 | A comparison of predictive performance of joint species distribution models for presence-absence data (David Wilkinson, University of Melbourne, Australia)	OP62 | Paper 25 | Acoustic spatial capture-recapture animal density estimates (David Chan, The University Of Auckland, New Zealand)	OP68 | Paper 220 | A unifying modelling framework for metabarcoding data (Alex Diana, University of Kent, UK)
09h30	09h45	15min	OP51 | Paper 49 | Using a Bayesian multi-state mark-recapture model to assess cost of first reproduction and influence of entanglement on recruitment in female North Atlantic right whales (Joshua Reed, Macquarie University, Australia)	OP57 | Paper 133 | Bayesian joint species distribution modelling using Stan (Fiona Seaton, UK Centre For Ecology & Hydrology, UK)	OP63 | Paper 174 | A spatial capture-recapture model with spatial clustering of detections within individual capture histories (Ben Stevenson, University Of Auckland, New Zealand)	OP69 | Paper 57 | A hierarchical modeling approach for environmental DNA metabarcoding: inference of species detection process, site occupancy, and study design (Keiichi Fukaya, National Institute for Environmental Studies,
09h45	10h00	15min	OP52 | Paper 137 | Life-history traits variation of the North-East common dolphin population evidenced through cross-sectional monitoring (Ettienne Rouby, Centre D'etudes Biologiques De Chizé, France)	OP58 | Paper 209 | Inferring species interactions from multivariate presence-absence time-series data - should one explicitly account for the observation process? (Jenny Niku, University Of Jyvaskyla, Finland)	OP64 | Paper 117 | Design and analysis of large-scale spatial capture-recapture surveys (Ian Durbach, University Of St Andrews, UK)	
10h00	10h15	15min	OP53 | Paper 234 | Quantifying individual variation, selection, and additive genetic variance in migration versus residence with full-annual-cycle capture-recapture models (Paul Acker, Norwegian University of Science and Technology, Norway)	OP59 | Paper 223 | Hierarchical Ordination (Bob O'Hara, NTNU, Norway)	OP65 | Paper 224 | Assessing precision and accuracy of hierarchical models for abundance estimation in camera trap studies through a simulation study of movement trajectories from focal and non-focal species (Martijn Bollen, UHasselt - Hasselt University, Belgium)	
10h15	10h30	15min	OP54 | Paper 116 | Spatio-temporal point processes as meta-models for population dynamics in heterogeneous landscapes (Patrizia Zamberletti, INRAE -BioSP, France)	OP60 | Paper 313 | Model-based hypothesis testing for multivariate (Maeve McGillycuddy, University Of New South Wales, Sydney, Australia)	OP66 | Paper 144 | A Long-Term Age-Specific Survival Analysis of Reintroduced Tiger (Panthera tigris tigris) in Panna Tiger Reserve, Central India (Supratim Dutta, Wildlife Institute Of India, India)	
10h30	11h00	30min	Tea / Coffee Break			
11h00	12h30	1h30	SESSION 13 | Occupancy modelling (Chairs: TBC)	SESSION 14 | Movement Ecology, Space Use and Habitat Selection (Chairs: TBC)	SESSION 15 | Multi-species modelling (Chairs: TBC)	SESSION 16 | Phylogenetic structure and population dynamics (Chairs: TBC)
11h00	11h15	15min	OP73 | Paper 126 | A dynamic occupancy model for interacting species with two spatial scales (Eivind Kleiven, UiT, The Arctic University Of Norway, Norway)	OP79 | Paper 236 | The fourth dimension in animal movement – the effect of temporal resolution in habitat selection analyses (Ulrike Schlaegel, University of Potsdam, Germany)	OP86 | Paper 105 | Fitting dynamic models for interacting species using both population count and interaction rate data (Frédéric Barraquand, CNRS, France)	OP92 | Paper 247 | Population regulation acts at multiple spatial scales: insights from a century of census data from a Northeast Atlantic seabird metapopulation (Jana Jeglinski, University of Glasgow, UK)
11h15	11h30	15min	OP74 | Paper 170 | Jaguarundi four ways: a comparison of range-wide distribution and habitat association estimates from four occupancy model extensions (Sara Williams, Panthera, ???)	OP80 | Paper 188 | Simulating animal movement from models derived from integrated step-selection analyses (Johannes Signer, University Of Goettingen, Germany)	OP87 | Paper 210 | Biotic interactions in breeding bird communities drive nonlinear responses to global changes (Pierre Gauzere, Université Grenoble Alpes / Cnrs, France)	OP93 | Paper 207 | Analysing the large-scale spatial synchrony of a boreal rodent population subject to high seasonality (Pedro Nicolau, Uit The Acrtic University of Norway, Norway)

11h30	11h45	15min	OP75 | Paper 286 | Leveraging sharing of camera-trap data to inform biodiversity conservation at large scales (Fabiola Iannarilli, Yale University, USA)	OP81 | Paper 55 | Spatially correlated step selection analysis (Rafael Arce Guillen, University of Potsdam, Germany)	OP88 | Paper 276 | Using HMSC models to understand interaction assembly (Teresa Morán López, Inibioma-conicet, Argentina)	OP94 | Paper 262 | A novel modelling framework to quantify phylogenetic structure in ecologically-relevant variables (Shubhi Sharma, Yale University, USA)
11h45	12h00	15min	OP76 | Paper 284 | Species' responses to anthropogenic habitats across the United States (Mahdieh Tourani, University of California, Davis, USA)	OP82 | Paper 297 | Analyzing behavioral-state dependent habitat selection using Hidden Markov Models in combination with Integrated Step Selection Analysis (Simona Picardi, Utah State University, USA)	OP89 | Paper 280 | Explicitly integrating trophic interactions in species distribution models improves ecological niche estimations and predictions (Giovanni Poggiato, Laboratoire Ecologie Alpine Grenoble, France)	OP95 | Paper 275 | Phylogenetic mixed models and applications in ecology (Benjamin Bolker, McMaster University, Canada)
12h00	12h15	15min	OP77 | Paper 35 | Animal density estimation for unmarked population using spatially explicit model (Riki Herliansyah, School of Mathematics, University of Edinburgh, UK)	OP84 | Paper 214 |Markov-switching step-selection functions for state-dependent habitat selection (Jennifer Pohle, University of Potsdam, Germany)	OP90 | Paper 16 | Species interactions and movement: modeling environmental effects on community dynamics (Becky Tang, Duke University, USA)	
12h15	12h30	15min	OP78 | Paper 148 | A multi-method approach to study outdoor recreation interaction with red deer (Solene Marion, University of St Andrews, UK)	OP85 | Paper 158 | Accounting for GPS Error in Habitat-Selection Studies (Clara Panchaud, University of Edinburgh, UK)	OP91 | Paper 229 | Using movement models to define metapopulation patch structure based on interaction probabilities (Eric Pederson, Department Of Biology, Concordia University, Canada)	
12h30	14h00	1h30	Lunch Break			
14h00	**15h30**	**1h30**	MEE workshop on reproducible coding	**Round Table Discussion 4** | Steps to increase diversity and accessibility of ISEC and ecological statistics. (Gordana Popovic, UNSW Sydney, Australia)	**Round Table Discussion 5** | A balanced review of multimodel inference in ecology (Bert van der Veen, Norwegian University Of Science And Technology, Norway)	
15h30	16h00	30min	Tea / Coffee Break			
16h00	17h00	1h00	**Invited Plenary 2** | Statistical ecology, hidden Markov models and the management of large carnivores in Europe (Olivier Gimenez, CNRS Montpellier, France)			
17h00	**18h30**	**1h30**	SESSION 17 | Time-series and trend analyses (Chairs: TBC)	SESSION 18 | Statistical theory (Chairs: TBC)	SESSION 19 | Data integration (Chairs: TBC)	SESSION 20 | Multi-species modelling (Chairs: TBC)
17h00	17h15	15min	OP98 | Paper 146 | Explicitly testing for population trends using noisy ecological data (Liam Singer, University Of Fribourg, Switzerland)	OP104 | Paper 89 | Count Regression and Machine Learning Techniques for Zero-Inflated Overdispersed Count Data: Application to Ecological Data (Bonelwa Sidumo, North-West University, South Africa)	OP110 | Paper 193 | "Mixed" occupancy designs: when do single visits add information to multi-visit data? (Gesa von Hirschheydt, Swiss Federal Institute for Forest, Snow and Landscape Research, Switzerland)	OP116 | Paper 111 | Spatial meshing methods for fast big data species distribution modelling, plus a vignette of R package 'meshed' using North American Breeding Bird survey data (Michelle Peruzzi, Duke University, USA)
17h15	17h30	15min	OP99 | Paper 119 | The role of detectability on bird population trend estimates in an open farmland landscape (Ana Sanz Pérez, Forest Science and Tecnology Centre of Catalonia, Spain)	OP105 | Paper 77 | Bayesian causal inference for zero-inflated data (Ben Swallow, University Of Glasgow, UK)	OP111 | Paper 213 | Wrong but Useful? Identifiability Regimes of Species Distribution and Abundance Models Under Model Mis-specification (Sara Stoudt, Bucknell University, USA)	OP117 | Paper 206 | Analysis of Presence-only data via Exact Bayes: the bayesPO package in R (Guido Moreira, Minho University, Portugal)
17h30	17h45	15min	OP100 | Paper 74 | Estimating the temporal scale of time series predictors on abundance and occurrence (Rahel Sollmann, Leibniz Institute For Zoo And Wildlife Research, Germany)	OP106 | Paper 249 | zoid: A mixture model for analyzing proportional data with zeros, ones, and overdispersion (Alexander Jensen, University of Washington, USA)	OP112 | Paper 53 | Integrating datasets to improve estimates of species distribution and abundance using non-linear models and a mean-dispersion parameterization of the Beta distribution (Audrey Mccombs, Iowa State University, USA)	OP118 | Paper 219 | rangr: An R package for simulating range dynamics of virtual species (Katarzyna Markowska, Population Ecology Lab, Adam Mickiewicz University, Poland)
17h45	18h00	15min	OP101 | Paper 164 | Hidden Markov and semi-Markov models: When and why are these models useful for classifiyng statein time series data? (Sofia Ruiz Suarez, Inibioma-conicet, Argentina)	OP107 | Paper 301 | Guidelines to validating generalized linear mixed models in Template Model Builder using quantile residuals (Andrea Havron, ECS Federal, USA)	OP113 | Paper 32 | Integrated community occupancy models: A framework to assess occurrence and biodiversity dynamics using multiple data sources (Jeffrey Doser, Michigan State University, USA)	OP119 | Paper 302 | sdmTMB: Fast, flexible, and user-friendly spatial and spatiotemporal generalized linear mixed-effects models (Sean Anderson, Fisheries and Oceans Canada, Canada)
18h00	18h15	15min	OP102 | Paper 68 | A GLMM approach for combining relative abundance surfaces (Paul Conn, NOAA Alaska Fisheries Science Center, USA)	OP108 | Paper 241 | Learning from the ups and downs of a multimodal hidden Markov model likelihood (Vianey Leos Barajas, Department of Statistical Sciences, University Of Toronto, Canada)	OP114 | Paper 91 | Improved inferences about landscape connectivity from spatial capture–recapture by integration of a movement model (Gates Dupont, Princeton University, USA)	OP120 | Paper 154 | Diet analysis using generalized linear models derived from foraging processes using R package mvtweedie (James Thorson, AFSC, Canada)
18h15	18h30	15min	OP103 | Paper 269 | Integrated ecological trend analysis from combining GAMs with meta-analysis (Perry de Valpine, University Of California, Berkeley, USA)	OP109 | Paper 315 | Towards an open-access platform offering resources to teach and learn Ecological Statistics (Sandra Hamel, Laval University, Canada)	OP115 | Paper 260 | Figuring out what counts: evaluating the effect of data quantity and quality on the performance of integrated population models (Hannah Sipe, University of Washington, USA)	OP121 | Paper 254 | Validation of parameter estimates from camera trap photo-captures using calibration models (Nilanjan Chatterjee, Wildlife Institute of India, India)

WEDNESDAY, 29 JUNE 2022

Start time	End Time	Duration	Track 1	Track 2	Track 3	Track 4
			Auditorium	Venue 4	Venue 5	Venue 6
07h30	08h00	30min	Registration open (Ground floor)			
08h00	09h00	1h00	**Invited Plenary 3** | Spatial Capture-Recapture: Highlights from a decade (or so) in review (Beth Gardener, University of Washington, USA)			
09h00	10h30	1h30	SESSION 21 | Movement Ecology, Space Use and Habitat Selection (Chairs: TBC)	SESSION 22 | Citizen science / Species distribution modelling (Chairs: TBC)	SESSION 23 | Hierarchical modelling & sampling (Chairs: TBC)	SESSION 24 | Population and spatial dynamics (Chairs: TBC)
09h00	09h15	15min	OP122 | Paper 225 | Fit parents and fat chicks? Linking foraging and breeding success in Adélie penguins (Taylor Hamlin, University of Otago, New Zealand)	OP128 | Paper 278 | Exploring multispecies occupancy models using eBird citizen science data for New Zealand (Nokuthaba Sibanda, Victoria University of Wellington, New Zealand)	OP134 | Paper 109 | Robust Bayesian Design for Monitoring Submerged Shoals off the coast of Western Australia (Dilishiya De Silva, Queensland University of Technology, Australia)	OP140 | Paper 85 | Predicting tree growth from repeat forest surveys using longitudinal models (Theresa O'Brien, University of New South Wales, Australia)
09h15	09h30	15min	OP123 | Paper 237 | Home range and core area analysis of Temminck's Pangolin to inform reintroduction sites for trafficked animals (Lindesay Scott-Hayward, University of St Andrews, UK)	OP129 | Paper 107 | On the need of big data and capacity building for conservation: the Snapshot Safari South Africa experience (Dr Lain Pardo, Nelson Manela University, South Africa)	OP135 | Paper 76 | Bayesian inference for categorical and censored regression models for phenological data (Philipp Boersch-Supan, British Trust for Ornithology, UK)	OP141 | Paper 314 | Machine Learning and Harmful Algal Blooms: Towards an expert Forecasting, Warning, and Decision-Support Numerical System. (Alain Lefebvre, Ifremer, France)
09h30	09h45	15min	OP124 | Paper 305 | Movement analysis of rescued and captive-reared Lesser Flamingos from Kamfers Dam, Kimberley, South Africa, 2019 – 2021 (Victoria Goodall, Nelson Mandela University, South Africa)	OP130 | Paper 293 | Modelling species communities through space and time using crowdsourced datasets (Maxime Fajgenblat, KU Leuven, Belgium)	OP136 | Paper 200 | Spatially balanced sampling designs are always more precise than random designs for estimating the size of aggregated populations (Jan Perret, University of Montpellier, France)	OP142 | Paper 36 | A machine learning method for estimating the probability of presence using presence-background data (Chathuri Samarasekara, RMIT University, Vietnam)
09h45	10h00	15min	OP125 | Paper 259 | Spatial population modelling of southern white rhinoceros, Ceratotherium simum simum, in Kruger National Park (Lorenzo Ruaro, Stellenbosch University, South Africa)	OP131 | Paper 67 | Volunteer-based monitoring schemes for priority species in Flanders, Belgium (Toon Westra, INBO, Belgium)	OP137 | Paper 274 | Whales and earthquakes: adapting distance sampling for use with Ocean Bottom Seismometer data for baleen whale density surface estimation (Danielle Harris, University of St Andrews, UK)	OP143 | Paper 26 | Modeling the invasion risk of Bactrocera zonata (Saunders) (Diptera Tephritidae) in the African continent under current and future climatic conditions (Kumbirai Zingore, University of Cape Town, South Africa)
10h00	10h15	15min	OP126 | Paper 125 | Modelling seabird central place foraging under anthropogenic environmental change (Elouise Bray, University of Sheffield, UK)	OP132 | Paper 66 | Species traits determine the influence of anthropogenically-modified habitats on forest bird occurrence throughout the annual cycle (Allison Binley, Carleton University, Canada)	OP138 | Paper 195 | Mapping bioregions on the west coast of South Africa using epifaunal trawl survey data (Donia Wozniak, University of Cape Town, South Africa)	OP144 | Paper 244 | Spatial transfer of Habitat Suitability Models to inform data-poor regions: a case-study of the deep-water coral species Desmophylum pertusum (Mari-Lise Franken, Nelson Mandela University, PEW Marine Fellows and South African National Biodiversity Institute, South Africa)
10h15	10h30	15min	OP127 | Paper 243 | Locating and tracking large insects using radio telemetry (Philip Dixon, Department of Statistics, Iowa State University, USA)	OP133 | Paper 102 | Adaptive sampling for community science: can both models and people benefit? (Susan Jarvis, UK Centre For Ecology & Hydrology, UK)	OP139 | Paper 135 | Unique animal photo-identification with siamese neural networks (Emmanuel Kabuga, University of Cape Town, South Africa)	
10h30	11h00	30min	Tea Break			
11h00	12h30	1h30	SESSION 25 | Multispecies modelling (Chairs: TBC)	SESSION 26 | Spatial capture-recapture and Abundance estimation (Chairs: TBC)	SESSION 27 | Species Distribution Modelling (Chairs: TBC)	SESSION 28 | Data integration (Chairs: TBC)
11h00	11h15	15min	OP146 | Paper 93 | Assessing Bias and Robustness of Social Network Metrics in Large Herbivores (Prabhleen Kaur, University College Dublin, Ireland)	OP152 | Paper 19 | Assessing the contribution of outlier individuals to landscape connectivity with spatial capture-recapture models and finite mixtures (Maëlis Kervellec, CEFE, University of Montpellier, CNRS, EPHE, IRD, France)	OP158 | Paper 232 | Integrated species distribution modelling with citizen science data (Mzabalazo Ngwenya, University of Cape Town, South Africa)	OP164 | Paper 231 | Variance partitioning for integrated population models (Jonas Knape, Swedish University of Agricultural Sciences, Sweden)
11h15	11h30	15min	OP147 | Paper 31 | Long-term social network analysis of large herbivore species in an African savanna landscape (Victor Mose, African Conservation Centre, Kenya)	OP153 | Paper 215 | Spatially heterogeneous detection probability in spatial capture-recapture: consequences and solutions (Ehsan Moqanaki, Norwegian University of Life Sciences, Norway)	OP159 | Paper 20 | Modeling the presence and spread of aquatic invasive species using an integrated-network model (John Fieberg, University of Minnesota, USA)	OP165 | Paper 304 | A semi-spatial integrated population model to assess population dynamics of recovering species (Lisanne Petracca, University of Washington, USA)

11h30	11h45	15min	OP148 | Paper 87 | A Bayesian co-abundance modelling approach to measure predator-prey relationships while accounting for detection, environmental covariates, and uncertainty (Zachary Amir, University of Queensland, Australia)	OP154 | Paper 186 | Estimating spatial and density-dependent survival using (Cyril Milleret, NMBU, Norway)	OP160 | Paper 94 | Drivers of compositional turnover of invasive alien plants in Kruger National Park (Cang Hui, Stellenbosch University, South Africa)	OP166 | Paper 147 | Estimating density dependence using Integrated Population Models: an evaluation of current and alternative methods (Matthieu Paquet, Institute of Mathematics of Bordeaux, University Of Bordeaux; Swedish University of Agricultural Sciences, France & Sweden)
11h45	12h00	15min	OP149 | Paper 187 | Scalable spatio-temporal community modelling via Krylov subspace methods (Gleb Tikhonov, University of Helsinki, Finland)	OP155 | Paper 300 | Integrating telemetry data into mark recapture analysis: case study of false killer whale (Pseudorca crassidens) abundance estimation in Hawaiian waters (Janelle Badger, National Oceanic And Atmospheric Administration, USA)	OP161 | Paper 180 | Woody-plant encroachment leads to widespread occupancy declines in southern Africa's birds (Joseph White, University of the Witwatersrand, Johannesburg, South Africa)	OP167 | Paper 113 | Beyond bespoke: standardizing integrated population models for comparative and range-wide studies (Chloé Nater, Norwegian Institute for Nature Research, Norway)
12h00	12h15	15min	OP150 | Paper 227 | Variability issues in compositional regression models to understand the marine community dynamic of Abrolhos in Brazil. A hierarchical approach using Bayesian inference (Pamela Solano, Centre for the Research and Technology of Agro-Environmental and Biological Sciences UTAD, Portugal)	OP156 | Paper 79 | A maximum likelihood method for encounters of unmarked animals at points (David Borchers, University of St Andrews, UK)	OP162 | Paper 132 | Using movement modelling to Integrate transect and telemetry data (Paul Blackwell, University of Sheffield, UK)	OP168 | Paper 75 | Model selection for integrated population models: selecting age structure with multiple data types (Rachel Mccrea, University of Kent, UK)
12h15	12h30	15min	OP151 | Paper 167 | A Bayesian hierarchical modelling approach to estimating landbird detectability in a multi-species context (Brandon Edwards, Carleton University, Canada)	OP157 | Paper 277 | Multiple-observer protocol for drone-based abundance estimation: integrating counts from manual review and accessible deep learning algorithms (Ismael Brack, Federal University of Rio Grande Do Sul, Brazil)	OP163 | Paper 185 | Bird's response to seasonality: Investigating the range dynamics of birds through dynamic occupancy models. (Luvuyo Kani, University of Cape Town, South Africa)	OP169 | Paper 194 | Benefits and limitations of model-based data integration for the estimation of temporal trends in biodiversity and identification of trend drivers (Lionel Hertzog, Thünen Institute For Biodiversity, Germany)
12h30	18h00	5h30	Afternoon Excursions (packed lunch provided)			

THURSDAY, 30 JUNE 2022

Start time	End Time	Duration	Track 1	Track 2	Track 3	Track 4
			Auditorium	Venue 4	Venue 5	Venue 6
07h30	08h30	1h00	Round Table Discussions Follow-Up Session			
08h30	09h30	1h00	Poster Session 2 (See Poster Programme)			
09h30	10h30	1h00	SESSION 29 | Software developments (Chairs: TBC)	SESSION 30 | Biodiversity (Chairs: TBC)	SESSION 32 | Disease ecology, Ecotoxicology and Stressors (Chairs: TBC)	
09h30	09h45	15min	OP170 | Paper 70 | The R package stelfi for fitting self-exciting spatiotemporal point process models (Charlotte Jones-Todd, University of Auckland, Australia)	OP174 | Paper 56 | Acoustic biodiversity (Jing Liu, University of Auckland, New Zealand)	OP182 | Paper 112 | Developing a Bayesian state-space model for whale health and vital rates to quantify the combined effects of multiple stressors (Enrico Pirotta, University of St Andrews, UK)	
09h45	10h00	15min	OP171 | Paper 46 | nimbleHMC: Hamiltonian Monte Carlo Sampling with NIMBLE (Daniel Turek, Williams College, USA)	OP175 | Paper 64 | Invisible biodiversity: widespread extinction debts and colonization credits in US bird communities (Yacob Haddou, University of Glasgow, UK)	OP183 | Paper 310 | Quantifying long-term changes in southern right whales' behavioural response to kelp gull micropredation using a latent covariate Markov model (Iván Barberá, INIBIOMA, CONICET, Argentina)	
10h00	10h15	15min	OP172 | Paper 81 | Laplace approximation in NIMBLE (Wei Zhang, University of Glasgow, UK)	OP176 | Paper 110 | An ecological forecasting manifesto for a Global Biodiversity Hotspot (Jasper Slingsby, University Of Cape Town, Biological Sciences And Seec, South Africa)	OP184 | Paper 181 | When statistics encounter ecotoxicology - Towards new insights in environmental risk assessment (Sandrine Charles, University Lyon 1, France)	
10h15	10h30	15min		OP177 | Paper 161 | A protocol for reproducible functional diversity analyses (Facundo Palacio, Universidad Nacional de La Plata, Argentina)	OP185 | Paper 114 | Using new wavelet tools to disentangle the role of local and global climatic forcing on the dengue epidemics (Bernard Cazelles, CNRS, France)	
10h30	11h00	30min	Tea Break			
11h00	12h30	1h30	SKILLS SHOWCASE 01 | Deep learning and bioacoustics (Emmanuel Dufourq, Aims & Stellenbosch University, South Africa)	SKILLS SHOWCASE 02 | Model-based data integration: a primer and practical guide (Saras Windecker, University of Melbourne, Australia)	SKILLS SHOWCASE 03 | Advances in piecewise estimation of path models (Jacob (Bob) Douma, Wageningen University, The Netherlands)	SKILLS SHOWCASE 04 | Defensive Programming: How to Help Shield Your Code From Error (Michael Bertolacci, University Of Wollongong, Australia)
12h30	14h00	1h30	Lunch Break			

13h00	14h00	1h00	Lunch hour Workshop: "MEE: Getting published"			
14h00	15h30	1h30	SESSION 33 | Movement Ecology, Space Use and Habitat Selection (Chairs: TBC)	SESSION 34 | Species Distribution Modelling (Chairs: TBC)	SESSION 35 | Conservation, management and Decision analysis (Chairs: TBC)	SESSION 36 | Abundance Estimation (Chairs: TBC)
14h00	14h15	15min	OP186 | Paper 42 | Validating hidden Markov models to inform seabird conservation (Rebecca Akeresola, University of Edinburgh, UK)	OP192 | Paper 54 | Effects of including community-level or species-specific data on the performances of a Joint Species Distribution Model: a case study with a species-rich marine benthic communities (Clément Violet, Institut français de recherche pour l'exploitation de la mer, France)	OP222 | Paper 83 | Quantifying the effect of bycatch mitigation efforts on the population dynamics of a long-lived seabird (Abby Bratt, University of Washington, USA)	OP204 | Paper 115 | Accounting for varying spatial scales in the production of UK butterfly abundance estimates (James Clarke, University of Kent, UK)
14h15	14h30	15min	OP187 | Paper 162 | Can ecological forecasting help mitigate the risk of collision between whales and commercial vessels? The case of the endangered Southern Resident Killer Whales (Marine Randon, Simon Fraser University, Canada)	OP193 | Paper 242 | Mapping malaria vectors to inform malaria control in Limpopo, Mpumalanga and KwaZulu-Natal, South Africa using climate driven models (Nada Abdelatif, South African Medical Research Council, South Africa)	OP223 | Paper 257 | Ship strikes in the north-east Atlantic: identifying hotspots and simulating mitigation measures (James Robbins, University of Portsmouth, UK)	OP205 | Paper 128 | Improved double observer survey method to estimate a mountain ungulate population in Gran Paradiso National Park (Italian Alps) (Matteo Panaccio, University of Cester, UK)
14h30	14h45	15min	OP188 | Paper 251 | Assessing beaked whale behavioral response to naval sonar using a hierarchical hidden Markov model (Stacy Deruiter, Calvin University, USA)	OP194 | Paper 196 | Principal spatio-seasonal patterns of Octopus vulgaris in the Mauritanian waters from 1987 to 2017 (Dedah Ahmed Babou, French National Research Institute For Sustainable Development, France)	OP224 | Paper 120 | South Africa's national environmental screening tool: an online tool to ensure responsible land use decision-making and the protection of species of conservation concern (Dominic Henry, Seec, UCT, South Africa)	OP206 | Paper 189 | Eats, moults & leaves: estimating grey seal pup production from serial counts at breeding colonies (Eiren Jacobson, Centre for Research into Ecological and Environmental Modelling, University of St Andrews, UK)
14h45	15h00	15min	OP189 | Paper 80 | Using movement modelling to understand interactions with fisheries and inform spatial management of great white sharks in the southwest Indian Ocean (Theoni Photopoulou, University of St Andrews, UK)	OP195 | Paper 191 | A multi-observation-platform habitat suitability model for vampire bat distribution in Peru (Rita Ribeiro, Ibahcm, Glasgow University, UK)	OP225 | Paper 295 | Estimating Population Demographics and Allowable Take for Peregrine Falcons (Falco peregrinus) in North America (Matthew Gould, New Mexico State University, USA)	OP207 | Paper 124 | A framework for predicting species abundances from distributional patterns of presences and absences: simulation and empirical tests (Aliénor Stahl, Concordia University, Canada)
15h00	15h15	15min	OP190 | Paper 271 | Modeling the Feedback Between Movement and Thermoregulation in Ectotherms with Hidden Markov Models (Simone Collier, School of the Environment, University of Toronto, Canada)	OP196 | Paper 239 | Spatio-temporal ecosystem drivers of Eastern Scotian Shelf shrimp (Pandalus borealis) (Fonya Irvine, Concodia University, Canada)	OP226 | Paper 168 | Building a framework for adaptive management of an invasive species (Brielle Thompson, University of Washington, USA)	OP208 | Paper 235 | New Approaches to Estimating Population Size for Marine Species (Joanna Mills Flemming, Dalhousie University, Canada)
15h15	15h30	15min	OP191 | Paper 230 | Classifying California Horn Shark Behavior Using Semi-Supervised Hidden Markov Models (Jessica Long, University of Toronto, Canada)	OP197 | Paper 240 | Leveraging multiple hierarchical models to assess critical oceanographic drivers of forage fish distribution and availability in the Northeast US Continental Shelf ecosystem (Chandra Goetsch, Biodiversity Research Institute, USA)	OP227 | Paper 226 | Integrated population models for focal wildlife species inform landscape-scale forest restoration (Ana Miller-ter Kuile, Northern Arizona University, USA)	OP209 | Paper 175 | Clustering Cues Creates Clues to Count Creatures (Paul Van Dam-bates, University of St Andrews, UK)
15h30	16h00	30min	Tea / Coffee Break			
16h00	17h00	1h00	Special session on conservation in Africa			
18h30	LATE		Conference Dinner at GOLD Restaurant			

FRIDAY, 1 JULY 2022

Start time	End Time	Duration	Track 1	Track 2	Track 3
			Auditorium	Venue 4	Venue 5
08h30	09h00	30min	Registration open (Ground floor)		
09h00	10h30	1h30	SESSION 37 | Fisheries management (Chairs: TBC)	SESSION 38 | Statistical Theory (Chairs: TBC)	SESSION 39 |Acoustics and noise pollution (Chairs: TBC)
09h00	09h15	15min	OP210 | Paper 163 | Using Bayesian statistics to better inform the monitoring design of indigenous seacountry (Diego Barneche, Australian Institute of Marine Science, Australia)	OP216 | Paper 84 | Residual diagnostic tools for multivariate normality (David Warton, UNSW Sydney, Australia)	OP222 | Paper 90 | Animal-borne acoustic recorders inform mark-resight models for abundance estimates in North Island Brown Kiwi (Apteryx mantelli, Bartlett) (Alberto De Rosa, Massey University, New Zealand)
09h15	09h30	15min	OP211 | Paper 253 | Integrated modeling of condition and sexual maturity of witch flounder in Atlantic Canada (Andres Beita-Jimenez, Fisheries And Marine Institute, Memorial University Of Newfoundland, Canada)	OP217 | Paper 157 | Four principles for improved statistical ecology (Gordana Popovic, UNSW Sydney, Australia)	OP223 | Paper 263 | Comparing statistical methods to estimate sound production rates based on animal borne tag data (Tiago Marques, University of St Andrews / CEAUL / DBA / FCUL, UK)

09h30	09h45	15min	OP212 | Paper 192 | The use of joint modelling to integrate different fishery surveys results in a better niche identification and better prediction maps (Iosu Paradinas, University of St Andrews, UK)	OP218 | Paper 320 | A generic solution to testing model fit in piecewise path models with correlated errors given non-normality and non-linearity (Jacob (Bob) Douma, Wageningen University, The Netherlands)	OP224 | Paper 179 | The Interplay of Demographic Stochasticity and Environmental noise in Population Dynamics (Asmaa Tbaeen Stellenbosch University, South Africa)
09h45	10h00	15min	OP213 | Paper 318 | Are they fishing or not? Effect of time interval and method on estimated fishing effort in a bivalve dredge and octopus traps small scale fisheries in Portugal (Marta Rufino, IPMA CEAUL, Portugal)	OP219 | Paper 100 | Google matrix analysis of ecological meta-community networks (José Lages, University Of Bourgogne Franche-comtém, France)	OP225 | Paper 281 | Spatio-temporal trends and effects of oceanic noise on whale acoustic occurrence off the west coast of South Africa (Fanie Shabangu, Department of Forestry, Fisheries and the Environment, South Africa)
10h00	10h15	15min	OP214 | Paper 166 | Positive-Unlabeled learning to identify forced labor at sea (Rocio Joo, Global Fishing Watch, ???)	OP220 | Paper 29 | Bayesian Identifiability in Ecological Models (Diana Cole, University of Kent, UK)	OP226 | Paper 256 | Exploring patterns of responsiveness to sonar exposure: a Bayesian approach applied to multiple cetacean species (Phil Bouchet, University of St Andrews, UK)
10h15	10h30	15min	OP215 | Paper 270 | Bayesian modelling of smolt behavior under flow velocity intensity change (Noor Ben Jebria, EDF R&D, France)	OP221 | Paper 45 | Extented Sampled Posterior P-value as a tool for Joint-Species Distribution Models checking (Thierno-Ousmane Diallo, INRAE, France)	
10h30	11h00	30min	Tea / Coffee Break		
11h00	**12h30**	**1h30**	SESSION 40 | Conservation, management and Decision analysis (Chairs: TBC)	SESSION 41 | Occupancy modelling (Chairs: TBC)	SESSION 42 | Species Distribution Modelling (Chairs: TBC)
11h00	11h15	15min	OP228 | Paper 95 | Continuous land cover change detection in Subtropical Thicket ecosystems (Craig Mahlasi, University of Cape Town, South Africa)	OP234 | Paper 17 | Accounting for preferential sampling in longitudinal occupancy models (Marc Kéry, Swiss Ornithological Institute, Switzerland)	OP240 | Paper 211 | What is that map for? Aiding the clear communication of uncertainty in species distribution maps by considering their usage in practice. (Andrew Seaton, University of Glasgow, UK)
11h15	11h30	15min	OP229 | Paper 218 | Developing a decision-analytic tool to mitigate wildlife-based conflicts (Brady Mattsson, Institute of Wildlife Biology and Game Management; University of Natural Resources and Life Science, Vienna, Austria)	OP235 | Paper 22 | On the efficiency and heterogeneity of time-to-detection occupancy models (Wen-Han Hwang, National Chung Hsing University, China)	OP241 | Paper 41 | Process-based forecasting of near-term range shifts in marine species (Alexa Fredston, Rutgers University, USA)
11h30	11h45	15min	OP230 | Paper 202 | Delivering policy-relevant indicators: South Africa's Data Pipeline for Wetlands and Waterbirds (Francisco Cervantes, University of Cape Town, South Africa)	OP236 | Paper 201 | Fitting dynamic occupancy models to very large occurrence data sets using hidden Markov models (Byron Morgan, University of Kent, UK)	OP242 | Paper 261 | Modelling spatial species distributions with Bayes rule (Robbert van den Dool, Wageningen University, The Netherlands)
11h45	12h00	15min	OP231 | Paper 43 | Assessing the success of re-introductions whilst accounting for multi-species populations. (Fay Frost, Kent University, UK)	OP237 | Paper 58 | Sharing detection heterogeneity information among species in community models of occupancy and abundance can strengthen inference (Thomas Riecke, Swiss Ornithological Institute, Switzerland)	OP243 | Paper 212 | Sensitivity analysis to interrogate the effects of parameter choice on species distribution modelling output uncertainty (Vernon Visser, University of Cape Town, South Africa)
12h00	12h15	15min	OP232 | Paper 28 | Africa-wide elephant poaching associated with poor governance, limited law enforcement capacity, low human development, and global ivory price (Timothy Kuiper, University of Cape Town, South Africa)	OP238 | Paper 149 | Integrating multiple data sources for species' distribution models to evaluate management effects on focal bird species (Jamie Sanderlin, Rocky Mountain Research Station, USDA Forest Service, USA)	OP244 | Paper 294 | On the importance of constraining tree demography parameterisation with species distributions (Amael Le Squin, Universität Bayreuth, Germany)
12h15	12h30	15min	OP233 | Paper 145 | Quantifying and propagating uncertainty when assessing impacts of proposed offshore renewables developments on seabirds (Adam Butler, Biomathematics and Statistics Scotland, UK)	OP239 | Paper 160 | An integrated occupancy - abundance model for estimating species interactions (Joshua Twining, Cornell University, USA)	OP245 | Paper 308 | Improving predictive performance of trait-SDMs by parameterising variation in trait-environment relationships across environmental gradients (Saras Windecker, University of Melbourne, Australia)
12h30	13H30	1h00	Lunch Break		
13H30	**15h00**	**1h30**	CLOSING PLENARY		
13H30	13H30	1H00	**Invited Plenary 4** | Decision analysis and adaptive management for conservation (Iadine Chades, CSIRO Brisbane, Australia)		
13H30	14h00	30min	Closing Session		